

Appl. No. 10/812,670  
Reply to Office Action of July 13, 2005

### AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

#### Listing of Claims:

Claims 1 – 17 (canceled)

Claim 18 (currently amended): A system for monitoring body temperatures in a plurality of herd animals, said system comprising:

a plurality of radio frequency identification transponders, each said transponder having a temperature sensor for sensing animal temperature, each herd animal provided with one of said radio frequency identification transponders, each transponder positioned such that said temperature sensor is in a viable sensing location for sensing the animal's temperature;

a reader/interrogator for:

transmitting radio frequency signals to said transponders;

receiving radio frequency signals from said transponders, said received radio frequency signals containing animal temperature data from said temperature sensors; and

demodulating said received radio frequency signals into animal temperature data;

a memory for storing said animal temperature data; and

a microcontroller in communication with said reader/interrogator and said memory, wherein said microcontroller is for:

processing said animal temperature data and determining a baseline temperature for each animal by averaging said temperature data for each animal over time; and

The system of claim 17, wherein said microcontroller is further for providing an alarm indication when temperature data from any herd animal deviates a set percentage from said baseline temperature for said animal.

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**Claim 19 (previously presented): The system of claim 18, wherein said microcontroller is further for adjusting said temperature data by employing a correction factor to adjust for the sensor location in each animal.**